

REMARKS

Claims 1-36 were pending in the application, with claims 30 and 31 being withdrawn from consideration. The amendment adds new claims 39-40.

The Amendments to the Claims

Claim 1 has been amended to incorporate the limitation that the gel is aged at least 24 hours at a temperature between about 290 K and about 300K. This amendment is supported by original claim 9.

Claims 9 and 10 have been amended to specify that the gel is aged for more than 24 hours at a temperature between about 290 K and about 300K. These amendments are supported at page 10, lines 3-4 of the application as filed.

Claim 19 has rewritten in independent form to incorporate all the limitations of claim 1, from which it previously depended.

Claims 19, 20, 28 and 29 have also been amended to clarify the term "50/50 CO₂/CH₄ mixture" by replacing it with "equimolar CO₂/CH₄ mixture". The alternate expression is used at page 19, line 6 of the specification and is consistent with the Examiner's interpretation at item 4 of the Office Action. Line 1 of claim 28 has also been amended to delete "and" following "wherein".

Claim 35 has been amended to specify that the gel is aged for more than 24 hours at a temperature between about 290 K and about 300K. These amendments are supported at page 10, lines 3-4 of the application as filed.

New claim 39 depends from claim 36 and specifies that the gel is aged for more than 24 hours at a temperature between about 290 K and about 300K. New claim 40 depends from claim 36 and specifies that the gel is aged at least

48 hours at a temperature between about 290 K and about 300K. These limitations are supported at page 10, lines 3-4 of the application as filed

It is believed that no new matter has been added by any amendment.

The 35 U.S.C. 103 Rejections

Claims 1-8, 12, 13, 18 and 32-34

Claims 1-8, 12, 13, 18 and 32-34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa et al. (U.S. 6,503,294 B2) in view of Balkus, Jr. et al. (U.S. 5,830,429).

Applicants note that the two references relate to chemically different zeolite systems and that particular synthesis conditions for one zeolite system are not necessarily useful for a chemically different zeolite system. In particular, at col. 24, line 48 through col. 25, line 4, Yoshikawa et al. describe a gel-based method for synthesizing a SAPO-34 membrane. Balkus, Jr. et al. describes high silica zeolite compositions prepared using the structure directing metal complex bis(pentamethycyclopentadienyl)cobalt (III) hydroxide, Cp^*_2CoOH (col. 1, lines 11-16).

In addition, claim 1 has been amended to incorporate the limitation of claim 9, which was indicated to be in condition for allowance. In view of all the foregoing, Applicants therefore respectfully request reconsideration and withdrawal of the rejection of claim 1. Claims 2-8, 12, 13, 17 and 32-24 depend from and incorporate all the limitations of claim 1. Therefore Applicants respectfully request reconsideration and withdrawal of the rejection of claims 2-8, 12, 13, 17 and 32-24.

Claims 14-17 and 35

Claims 14-17 and 35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa et al. (U.S. 6,503,294 B2) and Balkus, Jr. et al. (U.S. 5,830,429) and further in view of the publication "Separation of Light Gas Mixtures Using SAPO-34 Membranes."

Claims 14-17 depend from amended claim 1, which is now believed to be in condition for allowance. Applicants therefore respectfully request reconsideration and withdrawal of the rejection of claims 14-17.

Claim 35 has been amended to incorporate the limitation that the gel is aged for more than 24 hours at a temperature between 290 K and 300K. Since this limitation is not taught or suggested by the references, either singly or in combination, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 35.

Allowable Subject Matter

Claims 20, 24-28 and 36-38 were allowed in the Office Action of March 7, 2007.

Claims 9-11 and 19 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form. Claims 9-11 depend from amended claim 1, which is now believed to be in condition for allowance. Applicants therefore respectfully submit that claims 9-11 are in condition for allowance. As suggested, claim 19 has been rewritten in independent form and is now believed to be in condition for allowance.

The New Claims


Claims 39-40 depend from claim 36 and recite additional limitations regarding the aging temperature. Since claim 36 was indicated to be allowable, claims 39-40 are also believed to be in condition for allowance.

Conclusion

All claims being in condition for allowance, passage to issuance is respectfully requested. If there are further issues related to patentability, the courtesy of a telephone interview is requested, and the Examiner is invited to call to arrange a mutually convenient time.

It is believed that a fee of \$750 is due with this submission (including \$450 for a two month extension of time, \$200 for one additional independent claim and \$100 for two additional dependent claims) It is intended that this fee will be paid electronically at the time of submission of this response. Please charge any deficiency or credit any overpayment of the fees accompanying this submission to deposit account 07-1969.

Respectfully submitted,


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